



# Policy Brief

June 2019



## **BONUS BASMATI**

### **Supporting maritime spatial planning for sustainable ecosystem services**

A wide range of uses need to co-exist in the same marine environment. To avoid unsustainable use, avoid conflicts, and utilise potential synergies among the different activities and stakeholder groups, maritime spatial planning has to be proactive. Thorough knowledge about the actual use of the marine area and the status of it is needed. In this process active interaction with the stakeholders are important for getting knowledge and their active participation in handling the potential conflicting interests. In the BONUS BASMATI project, new methods and tools for assessments and stakeholder dialogue and collaboration are under development to support these ongoing maritime spatial planning processes.

## **Challenges in MSP**

Marine space is under increasing pressure from human activities harming the marine ecosystems. Maritime spatial planning is one of the governance approaches aiming at intensifying the sustainable use of the seas and oceans. The goal of Maritime spatial planning is to ensure, that the increased use of the marine space takes place in a way that is consistent with the sustainable development of the marine environment. According to the EU Directive on Maritimes Spatial Planning, it is required to follow an ecosystem-based and thus holistic approach. In order to do so, tools are needed, and some tools are available but with various advantages and disadvantages. The aim of the BONUS BASMATI projects has been to develop a comprehensive package of tools to facilitate stakeholder dialogue and to assess the environmental impacts of societal activities regarding different maritime spatial planning proposals.

### **The need for tools to support stakeholder involvement and decision making**

Many different uses co-exist in the same marine environment. Their co-existence can be conflicting, when one activity blocks for other activities, more passive co-existence, when activities are not influencing each other, and can even co-existence more actively, when different activities create synergy. To develop synergy between the different uses and stakeholder groups the MSP planning process has to be pro-active. Thorough knowledge about the actual use of the marine space and the status of these is needed. In this process active interaction with the stakeholders is important for getting knowledge and their active participation in handling the potential conflicting interests. Planning for the marine environment has to take into consideration the national institutional structure and distribution of responsibilities between administrative levels and sector organisations. This is further complicated in a Baltic Sea Region perspective, where most sea activities influence across borders. For the cross-border planning, an awareness of institutional structures and differences as well as clear and understandable concepts are requested. Models and tools for thoroughly informed decisions as well as user-friendly tools for engaging stakeholders is therefore a central demand. Interviews with MSP planners in five BSR countries showed, that they are not currently using any decision-support tools. However, asked about wishes concerning decision support tools, the planners pointed out that it would be a benefit to have map-based tools, open for all, in order to facilitate stakeholder discussions.

### **Testing the BONUS BASMATI toolbox**

The toolbox developed in the BONUS BASMATI project is being tested in three case studies within the project: a Danish-German case study on the mitigating effect of mussels farming, a Latvian case study on identifying the most suitable areas for marine protected areas, and a pan Baltic case study on sustainable business potentials.



## The BONUS BASMATI Toolbox

### The Baltic Sea Atlas

stores project data in a structured, harmonised and traceable way

**MYTILUS** for cumulative impact assessments as well as support for mussel farming site selection by a user-friendly GIS tool are parts of the toolkit



### Ecosystem services and pressures

A revised CICES typology has been developed and the cascade model has been applied to develop a tool enabling semi-quantitative measurements of the relative importance of ecosystem components regarding provision of ecosystem services and benefits contributing to human wellbeing

### The Impact Assessment Framework

Addresses sustainability impacts to ensure ecosystem based management including integration of the human and natural domains, and sustainability themes, by allowing for fairness aspects to be addressed. This includes a) indicator based impact assessment, and b) stakeholder dialogues on sea uses, users and benefit distribution

**Governance & Maritime Spatial Planning**  
Stakeholder involvement supported by new tools for sustainable allocation of marine space in a multi-user, multi-platform collaborative spatial decision support environment – **the Baltic Explorer**



The interactive web map service is designed to enable group work in Maritime Spatial Planning in the Baltic Sea Region

**Baltic Explorer**  
Spatial decision support for MSP



The Baltic Explorer makes it easy:

- To browse maritime data layers from different data providers
- To conduct negotiation while drawing and editing spatial features in shared workspaces.
- To work simultaneously on the same view with different devices at the same time

In addition, the toolbox is being used and tested in other projects. At a Pan Baltic Scope stakeholder event in Umeå in March 2019, it was demonstrated how the collaborate web map facilities of the Baltic Explorer can facilitate dialogue on interests and the future planning of sea areas. The approach to ecosystem service provisions assessments being developed in the Latvian case study has been presented for MSP planners at the 6<sup>th</sup> Planning Forum in Tallinn in May 2019. And to align the BONUS BASMATI toolkit regarding perceptions and concepts on impact assessments, forthcoming external testing activities will be performed in cooperation with the SeaPlanSpace and BalticRIM projects. In addition, the user interfaces for the spatial decision support facilities will be tested.

## Next steps

To fit the user's needs, the BONUS BASMATI toolbox will be further improved and consolidated by being applied in the project case studies as well as in cooperation with other projects.

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## About the project

The BONUS BASMATI project sets out to analyse governance systems and their information needs regarding MSP in the Baltic Sea region in order to develop an operational, transnational model for MSP, while maintaining compliance with existing governance systems. New methods and tools for assessments of different plan-proposals are being developed. This includes spatially explicit pressures and effects on maritime ecosystem services in order to create the Baltic Explorer, which is a spatial decision support system (SDSS) for the Baltic Sea region to facilitate broad access to information.

### Project partners:

Aalborg University, Denmark (AAU), Aarhus University, Denmark (AU), Finnish Geospatial Research Institute, Finland (FGI), Latvian Institute of Aquatic Ecology, Latvia (LIAE)  
Leibniz Institute for Baltic Sea Research Warnemünde, Germany (IOW), Nordregio, Sweden (Nordregio), University of Turku, Finland (UTU)

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More about the project: [www.bonusbasmati.eu](http://www.bonusbasmati.eu)

More about The Baltic Sea Atlas: <http://bio-50.io-warnemuende.de/iowbsa/index.php>

More about The Baltic Explorer: <http://balticexplorer.eu/>

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